FEDERAL-STATE-PRIVATE
COOPERATIVE SNOW SURVEYS

WATER SUPPLY OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF
MAY 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbis Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG. 1970

WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MAY 8, 1971

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

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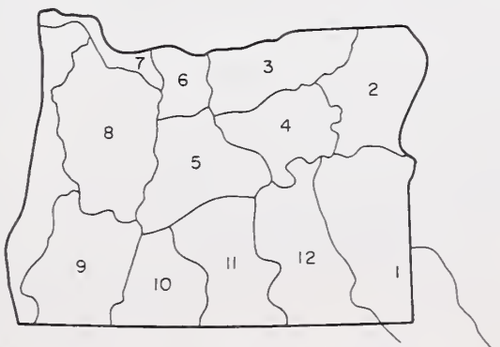
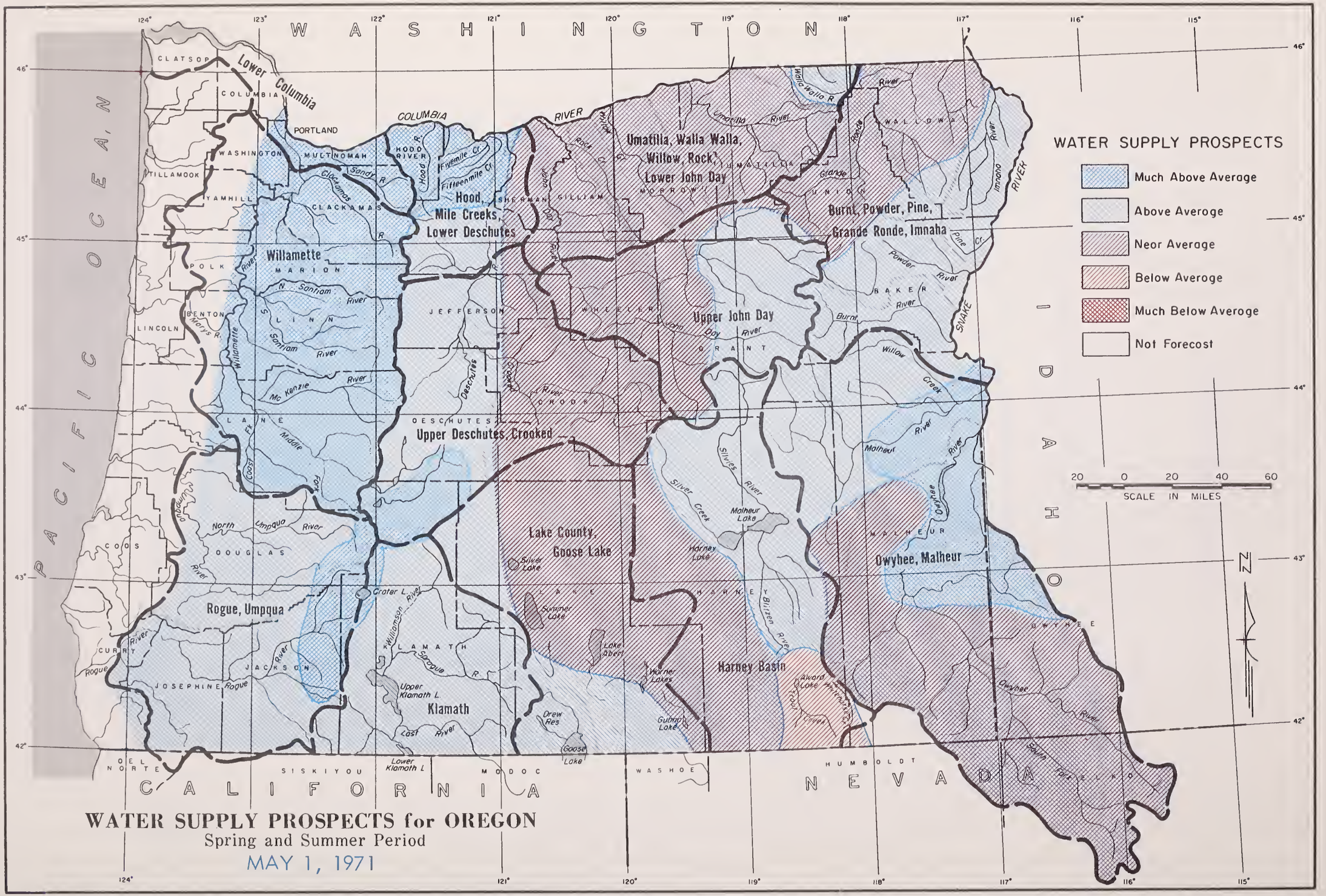


WATERSHED AREA LOCATIONS

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE



WATER SUPPLY PROSPECTS for OREGON

Spring and Summer Period

MAY 1, 1971

WATER SUPPLY OUTLOOK for OREGON

May 1, 1971

The water supply outlook for Oregon is still excellent and remains unchanged from last month. The snowpack around the state is mostly much above average with many May 1 alltime records measured in the Cascades. Reservoirs are generally full and forecasted streamflows for this summer are above average.

SNOW COVER

The May 1 snowpack is much above average in all areas of the state except the high desert areas of Southeastern Oregon. It is 125% to 175% in the rest of Eastern Oregon and nearly double normal amounts in the Cascades. Alltime records were measured in the vicinity of Mt. Hood.

PRECIPITATION

Precipitation during April ranged from average in Western Oregon and Klamath County, on down to 60% of normal in most other areas in the state. Rainfall has been very good, however, during the water year up to May 1.

RESERVOIR STORAGE

Major irrigation reservoirs are nearly full now with only 1 or 2 exceptions. Twenty-four reservoirs contained 2,813,000 acre feet of water on May 1. This is 94% of capacity and 119% of the average amount stored this time of year.

STREAMFLOW

Streamflow in Western Oregon during April was above average as expected. Cool temperatures held the snowmelt back in much of Eastern Oregon with resultant below normal runoff. Exceptions were the Owyhee and Malheur rivers which produced flows much above average.

continued on next page

STREAMFLOW (continued)

Representative May-July forecasts as a percent of normal are as follows:

NAME	FORECAST % OF 1953-67 AVERAGE
Owyhee Net Inflow	141
Malheur near Drewsey	118
Grande Ronde at La Grande	90
Umatilla at Pendleton	100
Willamette, Mid. Fk. near Oakridge	151
Rogue at Raygold	122
Silvies near Burns	100
Columbia at The Dalles	120

* This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

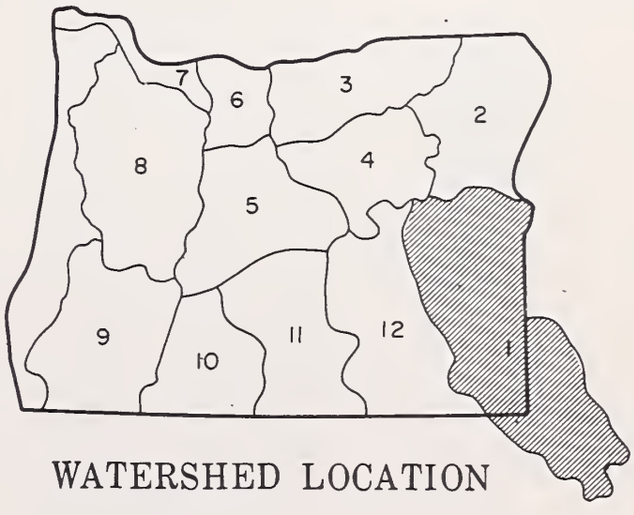
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE THE PROSPECT FOR WATER USERS IN THE OWYHEE AND MALHEUR WATERSHEDS THIS SPRING AND SUMMER. SNOW COVER IN THE AREA RANGES FROM 75 PERCENT ON THE OWYHEE WATERSHED TO 195 PERCENT ON THE UPPER MALHEUR. PRECIPITATION DURING APRIL WAS ONLY 64 PERCENT OF NORMAL. SOILS ARE WET AND WILL ENHANCE RUNOFF FROM SPRING PRECIPITATION. RESERVOIRS ARE NEARLY FULL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Excellent	Average
Bully Creek	Excellent	Average
Cow Creek	Excellent	Average
Jordan Creek	Excellent	Average
Jordan Valley Irrig. Dist	Excellent	Excellent
McDermitt Creek	Average	Fair
Oregon Canyon Creek	Average	Fair
Owyhee Project	Excellent	Excellent
Succor Creek	Excellent	Excellent
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Excellent	Excellent
Warmsprings Irrig. Dist.	Excellent	Excellent
Willow Creek (Reservoired)	Excellent	Excellent



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Bully Creek at Warmspring	25	190	March-May	[b]	13.1
Jordan Creek above Lone Tree Creek	66	138	May-July	[b]	48
Malheur near Drewsey	39	118	May-July	[b]	33
	40	118	May-Sept.	[b]	34
Malheur, North Fork at Beulah [d]	34	103	May-July	[b]	33
	40	105	May-Sept.	[b]	38
Owyhee Reservoir net Inflow [k]	225	141	May-July	233	160
	246	137	May-Sept.	255	179

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000	June 5	May 24
	250	July 5	June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Antelope	70.0	[b]	55.0	30.7
Beulah Reservoir*	60.0	59.9	58.6	50.1
Bully Creek	30.0	29.8	28.6	20.6
Owyhee	715.0	698.2	696.6	531.9
Warmsprings	191.0	179.5	175.8	137.2

*Known as Agency Valley.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Jordan Creek	1	101	104
Malheur River	2	101	97
Owyhee River	3	107	99

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Jordan Creek	2	30	100
Malheur River	3	90	195
Owyhee River	3	25	75

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

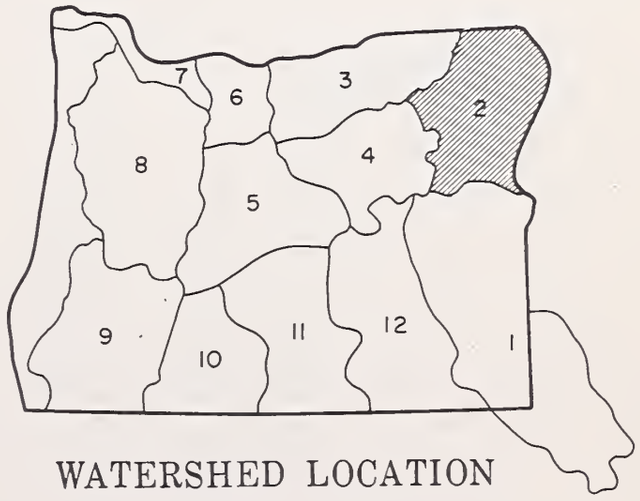
GENERAL OUTLOOK

STREAMS HEADING IN THE WALLOWA AND BURNT RIVER DRAINAGES WILL HAVE EXCELLENT WATER SUPPLIES THIS SPRING AND SUMMER, AND ABOVE AVERAGE ELSEWHERE EXCEPT IN THE GRANDE RONDE BASIN WHICH WILL BE NEAR AVERAGE. SNOW COVER RANGES FROM 65 PERCENT OF NORMAL ON THE GRANDE RONDE TO 170 PERCENT ON THE BURNT RIVER DRAINAGE. THE SCHNEIDER MEADOWS SNOW COURSE ABOVE HALFWAY SET A MAY RECORD WITH 42.4 INCHES OF WATER. PRECIPITATION DURING THE MONTH WAS 72 PERCENT OF AVERAGE. SOIL MOISTURE IS GOOD ON MOUNTAIN WATERSHEDS. MOST RESERVOIRS ARE NEARLY FULL. THE GRANDE RONDE AT La GRANDE FLOWED 95 PERCENT OF NORMAL DURING APRIL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Excellent	Excellent
Baker Valley	Excellent	Excellent
Big Creek	Excellent	Average
Clover Cr. (nr. N. Powder)	Excellent	Average
Cove	Excellent	Average
Durkee	Excellent	Average
Eagle Valley	Excellent	Average
Elgin	Average	Average
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Imnaha River	Excellent	Excellent
LaGrande-Island City	Average	Average
Lostine-Wallowa	Average	Average
No. Powder River-Wolf Creek	Excellent	Average
Pine Valley	Excellent	Excellent
Powder River-Elk Creek	Excellent	Average
Summerville	Average	Average
Sumpter Valley	Excellent	Average
Union-Hot Lake	Excellent	Average
Unity	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Bear near Wallowa	67	118	May-Sept.	77	57
Burnt near Hereford [d]	17.4	122	May-July	23	14.3
	19.1	123	May-Sept.	24	15.5
Catherine near Union	62	119	May-Sept.	69	52
Eagle Creek above Skull Creek	188	131	May-July	182	143
	203	130	May-Sept.	198	156
Grande Ronde at La Grande	91	90	May-July	116	101
	96	91	May-Sept.	120	105
Hurricane Creek near Joseph	53	118	May-Sept.	53	45
Imnaha at Imnaha	302	118	May-Sept.	272	225
Lostine near Lostine	137	118	May-Sept.	141	116
Powder River near Baker	54	128	May-July	b	42
	56	127	May-Sept.	b	44
Wallowa, East Fork near Joseph [d]	10.4	120	May-July	b	8.7
	13.5	120	May-Sept.	b	11.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [i]
Burnt, Powder	2	103	111
Grande Ronde, Catherine Cr., Imnaha River	3	108	110

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Phillips Lake	73.5	68.7	53.2	- -
Thief Valley	17.4	17.4	17.4	- -
Unity	25.2	24.7	25.6	24.1
Wallowa Lake	37.5	24.0	16.1	25.9

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [i]
Burnt River	4	80	170
Grande Ronde River above La Grande	4	40	65
Powder River	5	95	155
Wallowa, Imnaha, Catherine Creek	6	100	135

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

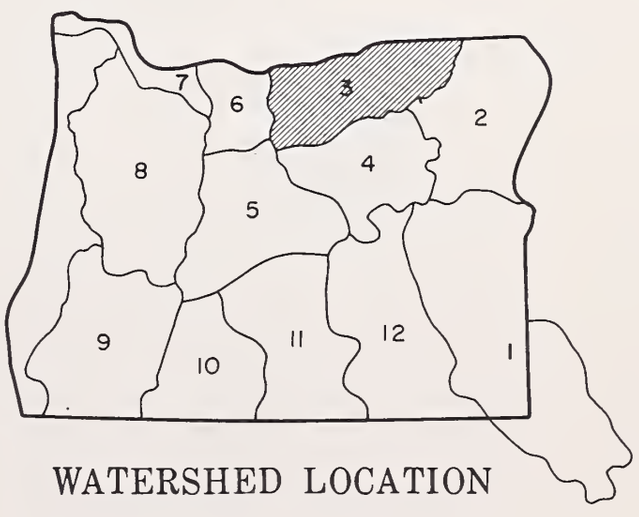
GENERAL OUTLOOK

NEAR AVERAGE WATER SUPPLIES ARE IN PROSPECT FOR AREA WATER USERS. SOME LATE SEASON SHORTAGES MAY DEVELOP ON LOW ELEVATION STREAMS DRAINING THE SOUTH SIDE OF THE BASIN. COOL WEATHER DURING THE MONTH HELPED RETAIN THE SNOWPACK AT 90 PERCENT OF NORMAL ON THE McKAY DRAINAGE TO 160 PERCENT ON THE WALLA WALLA DRAINAGE. PRECIPITATION WAS 99 PERCENT OF AVERAGE. WATERSHED SOILS ARE WET AND WILL ENHANCE RUNOFF FROM SPRING PRECIPITATION. RESERVOIR STORAGE IS GOOD BUT McKAY WILL NOT FILL. THE UMATILLA AT PENDLETON FLOWED 76 PERCENT OF NORMAL DURING THE MONTH.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Average	Average
Walla Walla River, So. Fork	Average	Average
Walla Walla River, Main	Average	Average
Walla Walla River, Little	Average	Average
Couse Creek	Average	Average
Dry Creek	Average	Average
Pine Creek	Average	Average
Umatilla River, Main	Average	Average
Wildhorse Creek	Average	Average
Umatilla R. (Cold Springs Reservoir)	Average	Average
Umatilla R. (McKay Res.)	Average	Average
McKay Creek	Average	Fair
Birch Creek	Average	Fair
Butter Creek	Average	Fair
Willow Creek	Average	Fair
Rhea Creek	Average	Fair
Rock Creek (John Day Tributary)	Average	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Birch Creek at Rieth	8.7	98	May-July	b	8.9
	8.7	98	May-Sept.	b	8.9
Butter Creek near Pine City	3.8	95	May-July	b	4.0
McKay near Pilot Rock	10.3	93	May-Sept.	b	11.0
Umatilla River near Gibbon	44	105	May-July	b	42
	50	104	May-Sept.	b	48
Umatilla River at Pendleton	75	100	May-July	89	75
	80	100	May-Sept.	93	80
Walla Walla, No. Fork near Milton	9.8	120	May-July	b	8.2
	10.5	121	May-Sept.	b	8.7
Walla Walla, So. Fork near Milton	39	103	May-July	b	38
	51	102	May-Sept.	b	50

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	May 20	May 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Cold Springs	50.0	49.6	50.0	49.7
McKay	73.8	62.2	69.4	57.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Umatilla, Walla Walla, McKay Creek	3	99	101

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
McKay Creek	3	50	90
Umatilla River	3	65	125
Walla Walla River	2	75	160

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

Area 4

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of

May 1, 1971

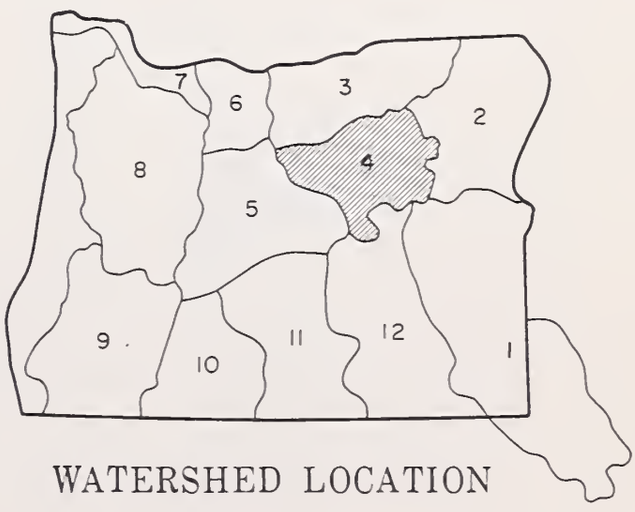
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

WATER USERS IN THE UPPER JOHN DAY BASIN WILL HAVE EXCELLENT WATER SUPPLIES THIS SPRING AND SUMMER. COOL WEATHER DURING APRIL HELPED TO MAINTAIN THE SNOWPACK AT 145 TO 160 PERCENT OF AVERAGE. PRECIPITATION WAS 85 PERCENT OF AVERAGE DURING THE MONTH. SOILS ARE SATURATED AND WILL BENEFIT RUNOFF. THE JOHN DAY AT SERVICE CREEK FLOWED 88 PERCENT OF AVERAGE DURING THE MONTH.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Excellent	Average
Beech Creek-Fox-Long Cr.	Excellent	Average
Bridge-Mountain Creeks	Average	Average
Camas Creek	Average	Average
Cherry Creek	Average	Average
Indian-Pine Creeks	Average	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Camas Creek near Ukiah	15.6	80	May-July	[b]	19.5
	15.9	79	May-Sept.	[b]	20.1
John Day at Prairie City	31	103	May-July	[b]	30
	36	105	May-Sept.	[b]	34
John Day, Middle Fork at Ritter	82	117	May-July	84	70
	86	116	May-Sept.	87	74
John Day, North Fork at Monument	406	112	May-July	[b]	362
	423	112	May-Sept.	[b]	377
Strawberry near Prairie City	9.1	117	Apr.-July	9.9	7.7
	9.8	117	Apr.-Sept.	10.6	8.4

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
John Day abv. Dayville	6	106	106
John Day, North Fork	2	102	108

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
John Day, North Fork	7	75	145
John Day abv. Dayville	4	75	160

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UPPER DESCHUTES, CROOKED WATERSHEDS
OREGON

as of

May 1, 1971

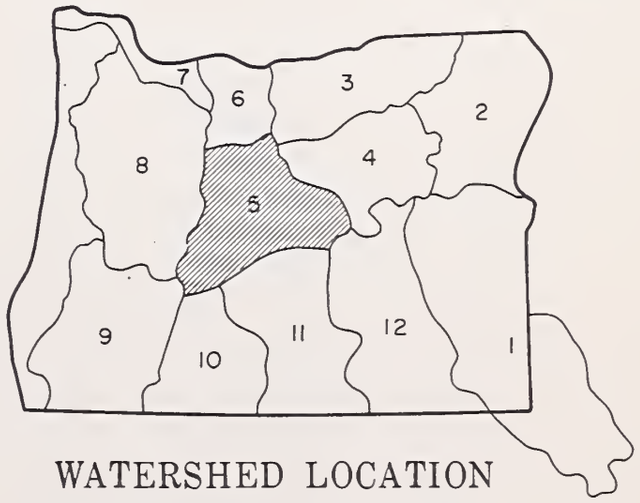
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

ABOVE AVERAGE TO EXCELLENT WATER SUPPLIES ARE IN PROSPECT FOR WATER USERS IN THE CROOKED AND UPPER DESCHUTES WATERSHEDS. THE MOUNTAIN SNOWPACK REMAINED 140 TO 165 PERCENT OF AVERAGE DUE TO COOL TEMPERATURES DURING APRIL, WITH SOME SNOW COURSES SETTING NEW MAY 1 RECORD HIGHS. RAINFALL WAS ONLY 64 PERCENT OF AVERAGE DURING THE MONTH. SOILS ARE WELL WETTED AND WILL HELP RUNOFF. RESERVOIR STORAGE IS GOOD IN THE AREA.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation District	Excellent	Average
Bear Creek	Average	Average
Beaver Creek	Average	Average
Camp Creek	Average	Average
Central Ore. Irrig. Dist.	Excellent	Excellent
Crooked River	Excellent	Average
Deschutes River	Excellent	Average
Hay-Trout Creeks	Average	Average
Lone Pine Irrig. Dist.	Excellent	Average
Mill Creek	Average	Average
North Unit Irrig. Dist.	Excellent	Average
Ochoco Creek	Excellent	Average
Sisters Irrigation Dist.	Excellent	Average
Snow Creek Irrig. Dist.	Excellent	Average
Squaw Creek Irrig. Dist.	Excellent	Excellent
Swalley Ditch	Excellent	Average
Tumalo Project	Excellent	Average
Walker Basin Irrig. Dist.	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Beaver Creek near Paulina	6.6	99	May-July	[b]	6.7
	6.8	97	May-Sept.	[b]	7.0
Crane Prairie Reservoir total Inflow	92	135	May-July	[b]	68
	144	130	May-Sept.	[b]	111
Crescent at Crescent Lake [d]	23	124	May-July	[b]	18.5
	28	117	May-Sept.	[b]	24
Crooked near Post	37	97	May-July	[b]	38
	39	97	May-Sept.	[b]	40
Deschutes at Benham Falls [d]	357	117	May-July	[b]	305
	553	109	May-Sept.	[b]	509
Deschutes below Snow Creek	86	146	May-Sept.	[b]	59
Deschutes, Little near La Pine [d]	94	154	May-July	34	61
	109	149	May-Sept.	39	73
Ochoco Reservoir net Inflow	11.0	91	May-Sept.	[b]	12.1
Odell near Crescent	34	136	May-Sept.	[b]	25
Squaw near Sisters	58	123	May-Sept.	43	47
Tumalo near Bend [d]	50	116	May-Sept.	36	43

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	Will not recede to 300	July 15
Deschutes at Bend	1500	Aug. 20	July 1
Little Deschutes near La Pine	400	June 22	June 7
	200	July 23	July 8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Crane Prairie	55.3	46.6	38.0	45.8
Crescent Lake	86.9	50.6	44.2	50.7
Ochoco	47.5	44.2	46.5	38.5
Prineville	153.0	148.8	155.6	147.1 [m]
Wickiup	200.0	195.1	191.2	193.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Crooked R., Upper Deschutes River	1	105	106

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Crooked, Ochoco	-	-	-
Deschutes abv. Wickiup	1	150	140
Little Deschutes	4	185	165
Tumalo & Squaw Crs.	3	155	150

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

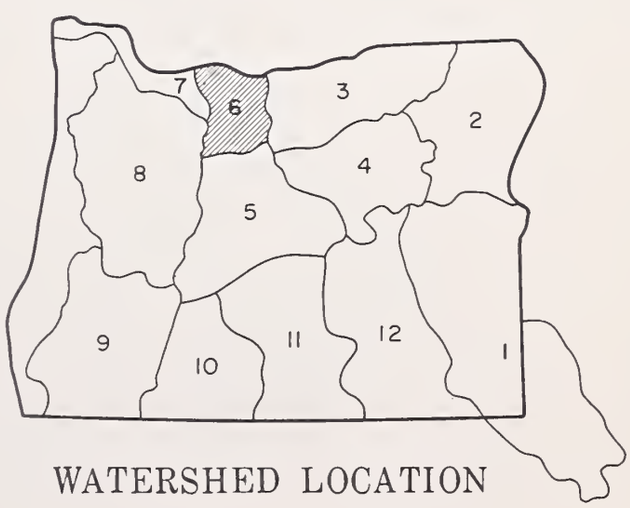
GENERAL OUTLOOK

WASCO COUNTY WATER USERS WILL HAVE EXCELLENT WATER SUPPLIES AVAILABLE TO THEM DURING THIS SPRING AND SUMMER. COOL WEATHER DURING APRIL HAS KEPT THE MOUNTAIN SNOWPACK AT 185 PERCENT OF AVERAGE. TWO SNOW COURSES, PHLOX POINT NEAR TIMBERLINE LODGE AND UMBRELLA FALLS NEAR MT. HOOD MEADOWS, SET NEW RECORD WATER CONTENTS OF 105 INCHES AND 113 INCHES RESPECTIVELY. THE PHLOX POINT SNOW COURSE WAS ESTABLISHED IN 1937 AND UMBRELLA FALLS IN 1962. SEVERAL OTHER SNOW COURSES IN THE AREA SET MAY FIRST RECORDS. PRECIPITATION WAS 66 PERCENT OF AVERAGE. MOUNTAIN SOILS ARE WET. RESERVOIR STORAGE IS ABOVE AVERAGE FOR THIS TIME OF YEAR.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Excellent	Excellent
Badger Creek	Excellent	Excellent
Dee Irrigation Dist.	Excellent	Excellent
East Fork Irrig. Dist.	Excellent	Excellent
Farmers Irrigation Dist.	Excellent	Excellent
Hood River Irrig. Dist.	Excellent	Excellent
Juniper Flat	Excellent	Excellent
Middle Fork Irrig. Dist.	Excellent	Excellent
Mile Creeks	Excellent	Excellent
Mill Creek	Excellent	Excellent
Mount Hood Irrig. Dist.	Excellent	Excellent
Rock-Gate-Threemile Crs.	Excellent	Excellent
Tygh Creek	Excellent	Excellent
White River	Excellent	Excellent



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Hood near Tucker Bridge	260	137	May-July	b	189
	324	133	May-Sept.	b	243
Hood, West Fork near Dee	119	132	May-July	78	90
	142	127	May-Sept.	97	112
White below Tygh Valley	133	155	May-July	63	86
	150	146	May-Sept.	76	103

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*55	July 15-31	

*Average cfs forecast to flow for this two-week period.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Clear Lake (Wasco)	11.9	5.9	7.4	4.9

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Hood River, Mile Creeks	1	101	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Hood River	3	185	185
Mile Creeks	-	-	-
White River	3	185	185

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
LOWER COLUMBIA WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT THROUGHOUT THE COLUMBIA BASIN. APRIL STORMS LEFT NEAR OR BELOW AVERAGE AMOUNTS OF PRECIPITATION IN MOST AREAS WITH A FEW AREAS ABOVE AVERAGE IN IDAHO. COOL WEATHER DELAYED SNOWMELT. MOST AREAS IN THE BASIN HAVE A NORMAL OR MUCH GREATER SNOWPACK. IT IS NEAR 150 TO 200 PERCENT ALONG THE CASCADE MOUNTAINS, EAST CENTRAL OREGON AND SOUTHERN IDAHO. THESE CONDITIONS MAINTAIN A SERIOUS FLOOD POTENTIAL FROM ABNORMALLY HEAVY SNOWPACKS ON MANY UPPER BASIN WATERSHEDS, PARTICULARLY IF ADVERSE TEMPERATURES OR PRECIPITATION SHOULD DEVELOP DURING THE MAIN SNOWMELT PERIOD. THE FLOW OF THE COLUMBIA RIVER AT THE DALLES, OREGON WAS ABOVE AVERAGE DURING APRIL FOR THE FOURTH MONTH IN A ROW AND WILL CONTINUE AS SUCH FOR THE NEXT SEVERAL MONTHS.

COLUMBIA RIVER BASIN

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SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Sandy River	2	180	175

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST		FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Columbia at The Dalles	72,200	121	May-June		59,688
	110,900	120	May-Sept.		92,457
Sandy River near Marmot	292	122	May-July		239
	348	119	May-Sept.		293

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW[d] (1,000 A.F.) APR.— SEPT.	APR.— JUNE	MAY—JUNE	PEAK (1,000 c.f.s)	DATE
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,903	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

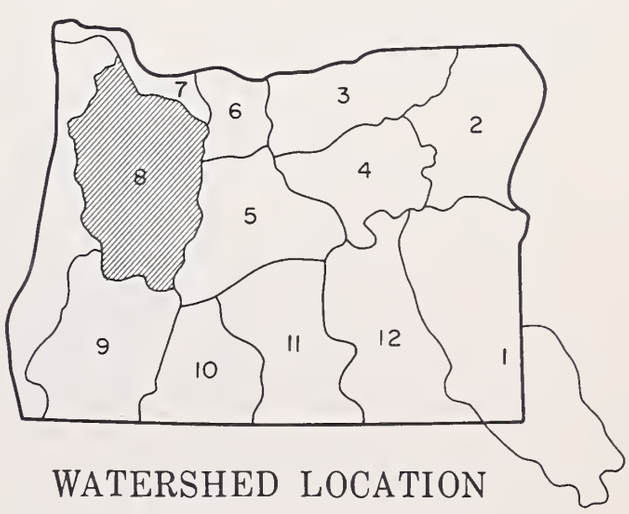
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IN THE WILLAMETTE VALLEY REMAINS VERY BRIGHT. RECORD MAY 1 WATER CONTENTS WERE MEASURED AT MANY MEDIAN AND HIGH ELEVATION SNOW COURSES IN THE CASCADES. NORMAL RAINFALL AND COOL TEMPERATURES CAUSED MANY COURSES TO RECORD INCREASES IN WATER CONTENT INSTEAD OF DECREASES AS IS NORMAL FOR THIS TIME OF YEAR. FLOOD CONTROL RESERVOIRS HAVE BEEN LOWERED TO RECEIVE THE HEAVY SNOWMELT RUNOFF THAT IS EXPECTED DURING THE NEXT TWO MONTHS. STREAMS WILL PRODUCE VOLUMES DURING THE MAY-JULY PERIOD--NEAR THE HIGH AMOUNTS MEASURED IN 1950 AND 1956.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Excellent	Excellent
Clackamas	Excellent	Excellent
McKenzie	Excellent	Excellent
Molalla	Excellent	Excellent
Santiam, North	Excellent	Excellent
Santiam, South	Excellent	Excellent
Willamette, Coast Fork	Excellent	Excellent
Willamette, Middle Fork	Excellent	Excellent



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Clackamas at Estacada	616	135	May-July	358	455
	737	130	May-Sept.	466	566
Clackamas above Three Lynx	521	149	May-July	273	348
	629	142	May-Sept.	368	442
McKenzie at McKenzie Bridge	426	126	May-July	266	338
	595	122	May-Sept.	395	487
McKenzie near Vida	903	119	May-July	[b]	754
	1162	117	May-Sept.	[b]	989
McKenzie, So. Fork near Rainbow	194	131	May-July	[b]	148
	231	130	May-Sept.	[b]	178
Oak Grove Fork above Power Intake	124	138	May-July	76	90
	167	130	May-Sept.	115	128
Row near Dorena	79	136	May-July	[b]	58
	85	137	May-Sept.	[b]	62
Santiam, North at Mehama [d]	760	148	May-July	[b]	513
	880	143	May-Sept.	[b]	614
Santiam, South at Waterloo	485	144	May-July	[b]	337
	518	138	May-Sept.	[b]	375
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge [d]	740	151	May-July	394	490
	835	141	May-Sept.	485	593
Willamette, No. Fk. of Mid. Fk. near Oakridge	180	143	May-July	[b]	126
	200	136	May-Sept.	[b]	147
Willamette at Salem [d]	3750	135	May-July	[b]	2783
	4250	129	May-Sept.	[b]	3286

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Blue River	85.6*	10.8	- -	- -
Cottage Grove	30.0*	5.2	23.5	24.0
Cougar	155.2*	26.3	117.6	- -
Detroit	299.9*	50.3	260.1	231.8
Dorena	70.5*	11.1	61.9	53.8
Fall Creek	115.0*	13.6	104.6	- -
Fern Ridge	94.2*	0.0	80.6	86.6
Foster	30.0*	4.0	23.6	- -
Green Peter	270.0*	42.8	236.5	- -
Hills Creek	200.0*	50.6	159.2	163.1
Lookout Point	337.2*	64.2	267.0	290.3
Timothy Lake	61.7	58.4	61.4	55.3

*Multiple purpose reservoir--space reserved primarily for flood runoff.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Clackamas River	2	370	265
McKenzie River	3	250	175
Row River	2	320	210
Santiam River	4	310	210
Willamette, Mid. Fk.	4	210	180

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
ROGUE, UMPQUA, WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

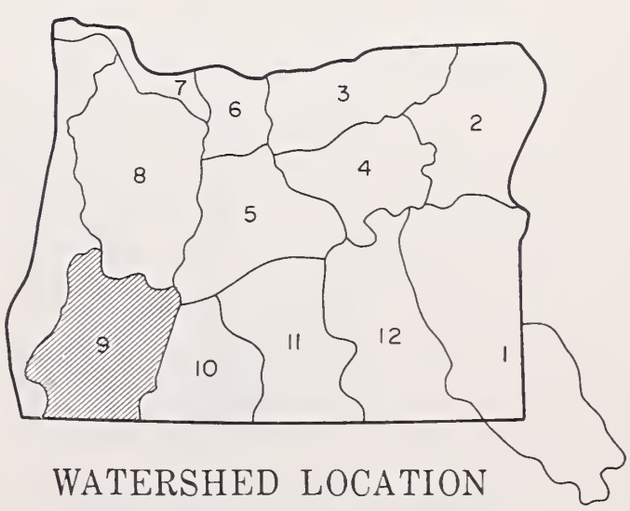
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS EXCELLENT. RECORD AMOUNTS OF SNOW WERE MEASURED MAY 1 AT MANY SNOW COURSES ALONG THE CREST OF THE CASCADES. THE SNOW COVER IS NOW 190% OF AVERAGE. RAINFALL WAS 110 PERCENT OF NORMAL FOR APRIL. RUNOFF IN STREAMS AND RIVERS WAS ABOVE AVERAGE DURING APRIL. MAJOR RESERVOIRS ARE FULL OR NEARLY FULL WITH MUCH SNOWMELT YET TO OCCUR.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Average	Average
Applegate River, Big	Average	Average
Applegate River, Little	Average	Average
Ashland Creek	Average	Average
Butte Creek, Big	Excellent	Average
Butte Creek, Little	Excellent	Average
Cow Creek	Excellent	Average
Deer Creek	Excellent	Average
Elk Creek	Excellent	Average
Emigrant Creek (abv. Res.)	Excellent	Average
Evans Creek	Excellent	Average
Gold Hill Irrigation Dist	Excellent	Average
Grants Pass Irrig. Dist.	Excellent	Average
Grave Creek	Excellent	Average
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off-Joe Creek	Average	Average
Neil Creek	Excellent	Average
Red Blanket Creek	Excellent	Average
Rogue River	Excellent	Average
Sucker Creek	Average	Average
Table Rock Irrig. Dist.	Excellent	Average
Thompson Creek	Excellent	Average
Wagner Creek	Excellent	Average
Williams Creek	Excellent	Average



WATERSHED LOCATION

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BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Applegate near Copper	153	109	April-Sept.	[b]	140
Clearwater above Trap Creek [d]	61	102	May-Sept.	[b]	60
Fourmile Lake net Inflow	8.1	198	April-Sept.	[b]	4.1
Hyatt Reservoir net Inflow [d]	4.3	179	May-Sept.	[b]	2.4
Illinois River near Kerby	113	122	May-July	[b]	93
	118	119	May-Sept.	[b]	99
Little Butte, N. Fk. at Fish Lake nr. Lake Cr. [d]	15.0	122	May-Sept.	[b]	12.3
Little Butte, S. Fk. near Lake Creek	50	152	April-July	[b]	33
Rogue above Prospect	260	135	May-July	[b]	192
	340	136	May-Sept.	[b]	249
Rogue, South Fork near Prospect [d]	70	152	May-July	[b]	46
	81	142	May-Sept.	[b]	57
Rogue River below South Fork	490	119	May-July	[b]	413
	650	118	May-Sept.	[b]	551
Rogue at Raygold near Central Point	640	122	May-July	392	525
	806	118	May-Sept.	528	685
Rogue at Grants Pass	780	118	May-Sept.	[b]	662
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls [d]	172	117	May-Sept.	[b]	147

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	June 17	May 27
Rogue at Raygold	1200	Sept 24	Aug. 7
	*2500	July 1	
	*1500	Aug. 15	

*Average daily cfs forecast to flow on this date.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Emigrant Lake*	39.0	38.9	39.0	36.7
Fish Lake	7.8	6.8	6.2	6.4
Fourmile Lake	16.1	13.0	12.7	11.8
Howard Prairie	60.0	63.1	60.6	40.1 [m]
Hyatt Prairie	16.1	16.0	16.2	14.2

*Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Applegate	-	-	-
Bear Creek	-	-	-
Butte Creek	2	260	170
Illinois River	-	-	-
North Umpqua	3	370	195
Rogue River	4	225	185

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-6 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

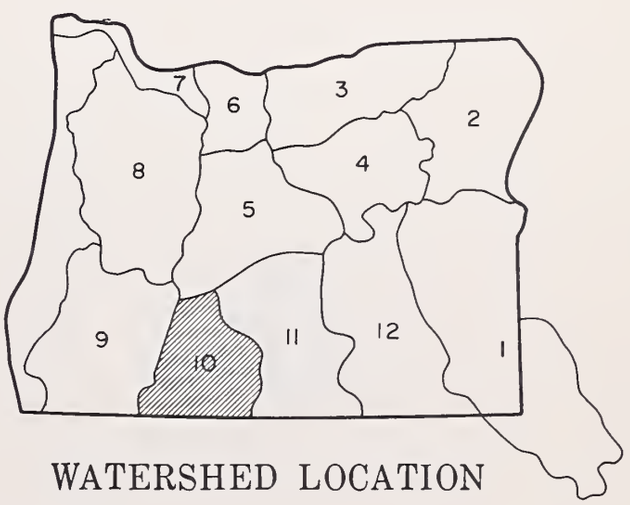
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS VERY GOOD. RAINFALL WAS NEAR NORMAL DURING APRIL. MANY SNOW COURSES ALONG THE CREST OF THE CASCADES SET NEW RECORDS OF WATER CONTNET FOR MAY 1. THE SNOWPACK IN KLAMATH COUNTY IS 160% OF AVERAGE. RUNOFF INTO UPPER KLAMATH LAKE WAS 134% OF AVERAGE DURING APRIL. ALL RESERVOIRS ARE STORING EXCELLENT AMOUNTS OF WATER FOR THIS TIME OF YEAR.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Excellent	Average
Lost River (Clear Lake)	Excellent	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Excellent	Average
Sprague River	Excellent	Average
Upper Klamath Lake	Excellent	Average
Williamson River	Excellent	Average



WATERSHED LOCATION

Report prepared by
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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Clear Lake Reservoir Inflow	20	132	May-Sept.	[b]	15.1
Gerber Reservoir Inflow	8.2	164	May-Sept.	[b]	5.0
Sprague near Chiloquin	220	106	May-Sept.	[b]	208
Upper Klamath Lake net Inflow [k]	475	113	May-Sept.	234	419
Williamson below Sprague River	380	115	May-Sept.	[b]	331

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Upper Klamath	2	102	105

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Clear Lake	440.2	419.2	367.1	266.5
Gerber	94.0	94.6	91.2	65.5
Upper Klamath Lake	584.0	516.2	553.0	519.2

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Lost River	2	160	215
Sprague River	-	-	-
Upper Klamath	5	240	160
Williamson River	3	190	150

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of

May 1, 1971

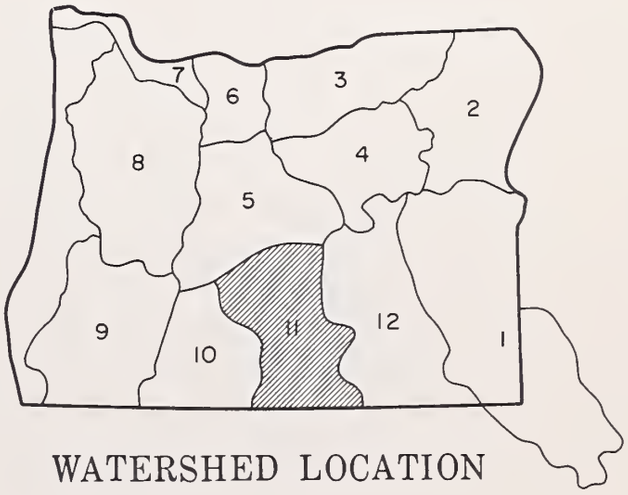
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS ABOVE AVERAGE FOR LAKE COUNTY. RAINFALL WAS NEAR NORMAL DURING APRIL. AN EXCELLENT SNOWPACK FOR MAY 1 STILL EXISTS WITH MOST OF THE SNOW AT HIGHER ELEVATIONS. ALL MAJOR RESERVOIRS ARE FULL AND SPILLING. WATER USERS SHOULD EXPERIENCE A VERY GOOD YEAR.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Excellent	Average
Crooked Creek	Excellent	Average
Deep Creek	Excellent	Average
Dry Creek	Excellent	Average
East Side Goose Lake	Excellent	Average
Guano Lake	Excellent	Average
Honey Creek	Excellent	Average
Lakeview Water Users Assn.	Excellent	Excellent
Rock Creek (Hart Mountain)	Average	Average
Silver-Buck Creeks	Average	Average
Summer Lake	Excellent	Average
Thomas Creek	Average	Average
Twentymile Creek	Excellent	Average
Warner Lakes	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Chewaucan near Paisley	68	117	May-July	61	58
	72	116	May-Sept.	65	62
Deep above Adel	55	131	May-July	47	42
	57	130	May-Sept.	49	44
Drews Reservoir net Inflow [d]	14.0	124	May-July	[b]	11.3
Honey near Plush	12.8	122	May-July	10.5	10.5
	13.0	121	May-Sept.	10.6	10.7
Silver Creek near Silver Lake	10.3	85	May-July	[b]	12.1
	11.8	84	May-Sept.	[b]	14.0
Twentymile near Adel	11.5	120	May-July	[b]	9.6
	11.9	119	May-Sept.	[b]	10.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [i]
Chewaucan, Silver Creek, Drew Creek	1	100	106
Honey, Deep, 20-mile Cr.	1	102	101

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Cottonwood*	8.7	8.7	8.7	5.8
Drews	63.0	63.0	63.7	54.3
Thompson Valley	19.5	- -	- -	14.8

*Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [i]
Chewaucan River	3	110	115
Deep Creek	2	165	200
Drew Creek	2	-	150
Honey Creek	1	525	170
Silver Creek	-	-	-
Twentymile Creek	-	-	-

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

as of

May 1, 1971

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

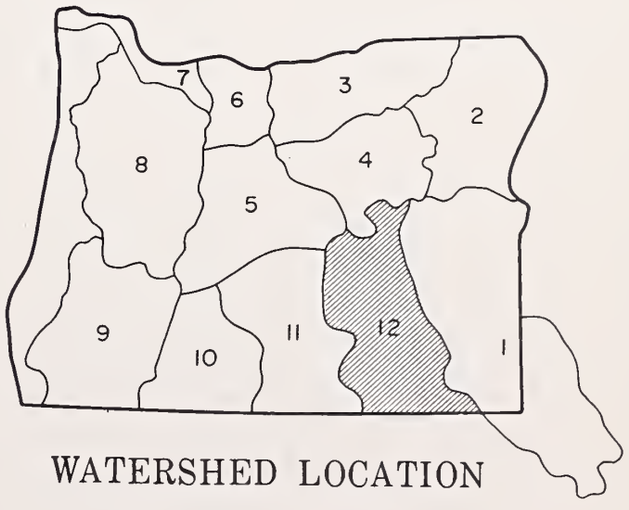
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK REMAINS ABOUT THE SAME AS LAST MONTH. ALTHOUGH RAINFALL WAS ONLY 85% OF NORMAL DURING APRIL TEMPERATURES WERE COOL AND, AS A RESULT, A GOOD SNOWPACK STILL REMAINS. THE MOST SNOW IS AT THE HIGHER ELEVATIONS ON BOTH SILVIES AND STEENS MOUNTAINS WATERSHEDS. DESERT STREAMS WILL EXPERIENCE SOME SHORTAGES LATER ON IN THE SUMMER.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Average	Fair
Cow Creek	Excellent	Average
Donner und Blitzen River	Excellent	Average
Mill-Coffeepot Creeks	Excellent	Average
Rattlesnake Creek	Excellent	Average
Silver Creek	Excellent	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Average	Fair
Trout Creek	Fair	Fair
Whitehorse Creek	Fair	Fair



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Donner und Blitzen near Frenchglen	48	120	May-July	41	40
	54	120	May-Sept.	45	45
Silver near Riley	7.2	107	May-July	4.9	6.7
Silvies near Burns	39	100	May-July	42	39
	41	100	May-Sept.	44	41
Trout near Denio	3.0	54	May-July	6.9	5.5
	3.5	58	May-Sept.	7.3	6.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [i]
Silvies River, Silver Cr.	2	104	105
Trout Cr., Donner und Blitzen River	-	--	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Donner und Blitzen R.	-	-	-
Silver Creek	-	-	-
Silvies River	4	70	165
Trout Creek	-	-	-

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

MAY 1, 1971

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	c				
Battle Creek (Ida.)	c				
Bear Creek (Nev.)	4/29	62	23.8	26.3	19.4[h]
Big Bend (Nev.)	4/30	1	0.1	5.1	0.9[h]
Blue Mountain Springs	4/29	37	15.8	18.6	8.4[h]
Blue Mtn. Springs Pillow	4/29		6.6	- -	- -
Buck Pasture[e]	c				
Buckskin, Lower (Nev.)	c				
Buckskin, Upper (Nev.)	c				
Bull Basin[e] (Ida.)	c				
Bully Creek[e]	c				
Call Meadow[e]	c				
Columbia Basin[e] (Nev.)	c				
Cottonwood-Indian[e]	c				
Crane Prairie	4/29	3	1.2	6.2	- -
Crow Camp[e] DISCONTINUED					
Disaster Peak (Nev.)	c				
Eldorado Pass	4/30	0	0.0	0.0	0.0[m]
Fawn Creek[e] (Nev.)	c				
Fish Creek	c				
Flag Prairie[e]	c				
Fox Creek (Nev.)	c				
Fry Canyon (Nev.)	4/30	0	0.0	4.7	1.0[h]
Gold Creek (Nev.)	4/30	0	0.0	4.4	0.0[h]
Granite Peak (Nev.)	c				
Hyde Pasture[e] (Ida.)	c				
Jack Creek, Lower (Nev.)	4/30	0	0.0	T	0.2[h]
Jack Creek, Upper (Nev.)	4/30	17	6.6	8.7	3.5[h]
Jack Peak (Nev.)	4/30	101	38.5	20.7	26.6[h]
Lake Creek R. S.	4/28	3	1.0	6.8	- -
Laurel Draw (Nev.)	c				
Logan Valley[e]	c				
Lookout Butte[e]	c				
Louse Canyon[e]	c				
Martin Creek (Nev.)	c				
Merritt Mountain (Nev.)	c				
Midas[e] (Nev.)	c				
Mud Flat (Ida.)	c				
Oregon Canyon[e]	c				
Quinn Ridge[e] (Nev.)	c				
Red Canyon[e] (Ida.)	c				
Rock Spring	4/28	0	0.0	0.2	0.2[m]
Rodeo Flat (Nev.)	4/30	0	0.0	3.0	1.2[h]
76 Creek (Nev.)	c				
Silver City (Ida.)	b			20.5	6.7[h]
Silvies	c				
South Mountain #2	5/3	9	4.3	15.2	- -
Stag Mountain[e] (Nev.)	c				
Stinking Water	5/3	0	0.0	0.0	- -
Succor Creek[e] (Ida.)	c				
Taylor Canyon (Nev.)	4/30	0	0.0	T	0.1[h]
Toe Jam[e] (Nev.)	c				
Tremewan Ranch (Nev.)	4/30	0	0.0	T	- -
Triangle (Ida.)	c				
Trout Creek[e]	c				
"V" Lake[e]	c				
Vaught Ranch[e] (Ida.)	c				
War Eagle[e] (Ida.)	c				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	4/29	112	49.2	44.8	39.7[m]
Aneroid Lake #2	4/30	104	45.6	40.0	34.7[h]
Anthony Lake	4/30	80	32.2	38.8	30.3[h]
Bald Mountain[e] (Ore.)	4/30	60	25.8	37.7	20.1[m]
Beaver Reservoir	4/28	22	7.2	10.6	6.9
Beaver Reservoir (Alt.)	4/29	35	9.3	- -	- -
Big Sheep[e]	4/30	68	30.0	26.6	22.0[m]
Blue Mtn. Summit	4/29	6	2.0	5.6	1.9
Bourne	4/28	24	10.7	14.3	7.7[h]
County Line	4/30	0	0.0	1.0	1.0[h]
Dooley Mountain	4/26	15	5.9	4.9	1.9[h]
Eilertson Meadows	4/27	19	7.7	11.1	4.5[h]
Eldorado Pass	4/30	0	0.0	0.0	0.0[m]
Gold Center	4/28	29	12.5	12.7	4.2[h]
Goodrich Lake				51.4	27.0[h]
Intake House	4/27	24	9.3	8.3	- -
Little Alps	4/30	43	15.9	19.6	13.1[h]
Little Antone	4/30	0	0.0	0.0	- -
Lucky Strike	4/29	30	10.7	14.6	8.5[h]
Meacham	4/28	T	T	5.5	2.4
Mirror Lake[e]	4/30	225	99.0	84.0	74.5[m]
Moss Spring	4/30	70	30.2	32.4	21.2[h]
Power Plant	4/27	0	0.0	0.0	- -
Schneider Meadows	4/28	94	42.4	33.8	24.3[h]
Schoolmarm	4/30	0	0.0	0.0	0.5[h]
Standley[e]	4/30	88	39.0	47.4	31.6[m]
Taylor Green	4/30	39	16.8	20.8	- -
Tipton	4/29	8	3.2	8.6	1.6[h]
Tipton Snow Pillow	Pillow Flat				
Tollgate	4/27	56	26.9	34.3	18.0
TV Ridge[e]	4/30	75	33.0	30.3	- -
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	4/30	5	2.1	11.8	2.8[h]
Battle Mountain Summit	4/28	0	0.0	T	0.3[m]
Blue Mountain Camp	4/27	17	7.2	11.4	3.3[h]
Emigrant Springs	4/28	0	0.0	2.4	1.0
Lucky Strike	4/29	30	10.7	14.6	8.5[h]
Meacham	4/28	T	T	5.5	2.4
Tollgate	4/27	56	26.9	34.3	18.0
Weston Mountain	4/27	0	0.0	0.0	0.0[m]

BASIC DATA SUPPLEMENT 1

MAY 1, 1971

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	4/30	80	32.2	38.8	30.3[h]
Arbuckle Mountain	4/30	5	2.1	11.8	2.8[h]
Battle Mountain Summit	4/28	0	0.0	T	0.3[h]
Beech Creek Summit	4/27	1	0.4	T	0.6[h]
Blue Mountain Springs	4/29	37	15.8	18.6	8.4[h]
Blue Mtn. Springs Pillow	4/29		6.6	- -	- -
Blue Mountain Summit	4/29	6	2.0	5.6	1.9
Derr	c				
East Fork Canyon[e]	c				
Gold Center	4/28	29	12.5	12.7	4.2[h]
Indian Creek Butte[e]	c				
Izee Summit	4/26	5	1.5	5.2	2.0[h]
Lucky Strike	4/29	30	10.7	14.6	8.5[h]
Marks Creek	4/29	0	0.0	0.0	T[h]
Ochoco Meadows	c				
Olive Lake[e]	4/29	62	27.0	25.5	16.5[h]
Schoolmarm	4/30	0	0.0	0.0	0.5[h]
Snow Mountain	c				
Starr Ridge	4/26	3	1.1	1.7	0.6[h]
Tipton	4/29	8	3.2	8.6	1.6[h]
Tipton Snow Pillow	Pillow flat				
Williams Ranch	c				
UPPER DESCHUTES, CROOKED WATERSHEDS					
Black Pine Spring	4/28	0	0.0	0.0	0.3
Caldwell Ranch	c				
Cascade Summit	4/30	101	46.9	22.8	25.3
Chemult	4/30	1	0.5	0.0	0.8[h]
Deer Creek	c				
Derr	c				
Hogg Pass	4/30	135	65.8	37.4	41.6
Hungry Flat	4/29	0	0.0	0.0	0.0
Irish-Taylor	c				
Irish-Taylor Pillow	5/1		57.4	- -	- -
Marks Creek	4/29	0	0.0	0.0	T[h]
Mowich	4/29	0	0.0	0.0	0.0[h]
New Crescent Lake	4/29	28	12.1	4.1	5.1
New Dutchman Flat #2	4/29	146	75.0	50.4	54.3
Ochoco Meadows	c				
Snow Mountain	c				
Snow Mountain Pillow	c				
Tamarack	c				
Tangent	4/29	56	27.2	13.9	11.9
Three Creek Butte	4/28	21	8.7	0.6	2.6[h]
Three Creek Meadow	4/28	62	27.8	16.0	13.2
Three Creek Mdw. Pillow	4/28		34.9	17.5	- -
Waldo Lake	c				
Willamette Pass	4/30	141	64.6	39.9	42.4
Willamette Pass Pillow	5/1		61.7	- -	- -

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadow					
Clear Lake	4/22	39	16.8	5.1	4.8[h]
Clear Lake (Experimental)	4/22	55	24.0	9.2	12.4[h]
Cooper Spur	4/30	22	9.0	0.0	- -
Cooper Spur (Alt.)	4/30	35	15.7	0.0	- -
Greenpoint Reservoir	4/30	56	26.6	12.2	- -
Knebal Springs	c				
Parkdale	c				
Phlox Point	4/23	202	105.6	63.1	65.6
Red Hill	c				
Still Creek	4/22	96	42.9	20.4	19.0
Still Creek (Alt #2)	4/22	94	42.9	- -	- -
Switchback	4/30	43	20.2	- -	- -
Tilly Jane	c				
Ulrich Ranch Junction	c				
Umbrella Falls	5/1	208	113.0	72.1	- -
Upper Valley	c				
WILLAMETTE WATERSHEDS					
Cascade Summit	4/30	101	46.9	22.8	25.3
Champion	4/29	120	57.8	19.3	26.3[h]
Clackamas Lake	c				
Clear Lake	4/22	39	16.8	5.1	4.8[h]
Clear Lake (Experimental)	4/22	55	24.0	9.2	12.4[h]
Dead Horse Grade	4/30	57	26.8	1.5	11.9[h]
Detroit (Town)	4/30	0	0.0	0.0	0.0
Detroit Dam	4/30	0	0.0	0.0	0.0
Golden Curry Creek	4/29	8	3.6	0.0	3.1[m]
Hogg Pass	4/30	135	65.8	37.4	41.6
Lake Harriet	c				
Laurel Mountain	c				
Layng Creek	4/29	0	0.0	0.0	0.0[m]
Lost Creek Ranch	4/30	0	0.0	0.0	0.0[h]
Lund Park	4/29	0	0.0	0.0	0.0[m]
Marion Forks	4/30	49	24.0	T	3.8[h]
Marys Peak	c				
Marys Peak (Alt.)	c				
McCredie Springs	4/30	0	0.0	0.0	0.0
McKenzie	4/30	130	68.9	38.6	45.2
McKenzie Bridge	4/30	0	0.0	0.0	0.0[h]
Meridian Dam	4/28	T	T	0.0	0.0
Mill City	4/30	0	0.0	0.0	0.0
Oakridge	4/30	0	0.0	0.0	0.0
Peavine Ridge	4/29		32.8	8.2	13.9[h]
Peavine Ridge Pillow	c				
Phlox Point	4/23	202	105.6	63.1	65.6
Railroad Overpass	4/30	0	0.0	0.0	T
Salt Creek Falls	4/30	66	28.2	3.2	10.2
Santiam Junction	4/30	72	34.6	2.8	14.3
Still Creek	4/22	96	42.9	20.4	19.0
Still Creek Alt. #2	4/22	94	42.9	- -	- -
Timothy Lake	4/23	56	24.3	- -	8.2[m]
Valsetz Summit	c				
Vida	4/30	0	0.0	0.0	0.0[h]
Waldo Lake	c				
Weaver Creek	4/29	0	0.0	0.0	0.0[m]
White Branch Slide	4/30	14	5.3	0.3	1.1[h]
Whitewater Bridge	4/30	0	0.0	0.0	T
Willamette Pass	4/30	141	64.6	39.9	42.4
Willamette Pass Pillow	5/1		61.7	- -	- -

BASIC DATA SUPPLEMENT 1

MAY 1, 1971

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
ROGUE, UMPQUA WATERSHEDS					
Althouse	c				
Althouse #2	c				
Annie Spring	4/30	144	65.5	50.1	43.1
Beaver Dam Creek	4/30	42	19.0	0.0	- -
Big Red Mountain	c				
Billie Creek Divide	5/3	53	24.0	9.3	13.9[h]
Caliban	4/27	112	48.8	36.2	- -
Champion	4/29	120	57.8	19.3	26.3[h]
Cold Springs Camp	4/27	120	54.2	29.7	- -
Cold Springs Camp Pillow	5/1		44.7	- -	- -
Deadwood Junction	4/30	18	7.5	0.0	- -
Diamond-Crater Summit	4/28	116	51.6	27.6	36.1[h]
Diamond-Crater Sum. Alt.	4/28	103	41.8	25.6	- -
Diamond Lake	4/28	72	27.5	14.6	16.8
Fish Lake	5/3	41	16.0	3.0	5.1[m]
Fourmile Lake	5/3	67	31.0	20.2	21.6[h]
Grayback Peak	c				
Howard Prairie	4/30	16	5.9	0.0	- -
Hyatt Prairie	4/30	16	5.7	- -	- -
King Mountain #1	4/27	39	18.2	1.8	- -
King Mountain #2	4/27	28	11.5	0.5	- -
King Mountain #3	4/27	0	0.0	0.0	- -
King Mountain #4	4/27	0	0.0	0.0	- -
King Mountain #5	4/27	0	0.0	0.0	- -
King Mountain #6	4/27	0	0.0	0.0	- -
Little Red Mountain	c				
Mt. Ashland Switchback	4/27	117	50.7	34.3	- -
Mule Creek	4/27	30	14.2	1.2	- -
North Umpqua	4/28	31	14.4	T	5.3[h]
Page Mountain	c				
Park Headquarters	4/30	181	83.3	62.2	59.1
Red Butte #1	4/26	73	31.9	3.8	12.6[h]
Red Butte #2	4/26	35	16.5	1.8	3.7[h]
Red Butte #3	4/26	9	3.8	0.6	1.2[h]
Red Butte #4	4/26	0	0.0	0.0	0.0[m]
Red Butte #5	4/26	0	0.0	0.0	0.0[m]
Red Butte #6	4/26	0	0.0	0.0	0.0[m]
Seven Lakes #2	c				
Seven Mile	c				
Silver Burn	4/29	31	14.0	0.0	3.0[h]
Siskiyou Summit	4/28	0	0.0	0.0	- -
Siskiyou Summit Alt. #2	4/28	0	0.0	0.0	- -
Ski Bowl Road	4/27	100	42.2	21.1	- -
South Fork Canal	4/27	0	0.0	0.0	0.0[m]
Trap Creek	4/27	26	12.0	T	5.4[h]
Whaleback	c				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
KLAMATH WATERSHEDS					
Annie Spring	4/30	144	65.5	50.1	43.1
Beatty (PP&L)	c				
Billie Creek Divide	5/3	53	24.0	9.3	13.9[h]
Bly Mountain	4/29	0	0.0	0.0	0.9[m]
Bly 101 Ranch (PP&L)	c				
Chemult	4/30	1	0.5	0.0	0.8[h]
Chiloquin (PP&L)	c				
Cold Springs Camp	4/27	120	54.2	29.7	- -
Cold Springs Camp Pillow	5/1		44.7	- -	- -
Crazyman Flat[e]	4/26	25	10.0	1.3	- -
Crowder Flat[e] (Calif.)	c				
Crystal (PP&L)	c				
Diamond-Crater Summit	4/28	116	51.6	27.6	36.1[h]
Diamond-Crater Sum. Alt.	4/28	103	41.8	25.6	- -
Diamond Lake Jct. (97)	4/28	0	0.0	0.0	0.0[h]
Dog Hollow[e]	c				
Finley Corrals[e]	4/26	46	18.4	7.4	- -
Fort Klamath (PP&L)	c				
Fourmile Lake	5/3	67	31.0	20.2	21.6[h]
Gerber	c				
Harriman (PP&L)	c				
Hyatt Prairie Reservoir	4/30	16	5.7	- -	- -
Kirk (PP&L)	c				
Lake of the Woods	4/27	27	10.1	2.1	6.3[h]
Park Headquarters	4/30	181	83.3	62.2	59.1
Pelican Guard Station	4/27	0	0.0	0.0	0.0[h]
Quartz Mountain	4/29	0	0.0	0.0	0.6[h]
Quartz Mountain (Ext.)	4/29	0	0.0	0.0	- -
Seven Lakes #2	c				
Seven Mile	c				
State Line[e] (Calif.)	c				
Strawberry	4/30	8	3.2	0.0	1.4[h]
Summer Rim[e]	4/26	48	19.2	17.8	- -
Summer Rim Snow Pillow	c				
Sun Mountain	4/26	70	30.1	18.3	- -
Sycan Flat[e]	c				
Taylor Butte	4/29	0	0.0	0.0	- -
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)	4/30	33	12.0	8.2	3.4
Bald Mountain (Nev.)	c				
Bear Flat Meadow[e]	c				
Camas Creek	4/30	17	6.3	1.2	- -
Cedar Pass (Calif.)	4/30	46	20.4	14.7	9.5
Colvin Creek[e]	c				
Cox Flat[e]	c				
Crowder Flat[e] (Calif.)	c				
Dismal Swamp[e] (Calif.)	c				
Finley Corrals[e]	4/26	46	18.4	7.4	- -
Hart Mountain[e]	c				
Little Bally Mtn.[e] (Nev.)	c				
Mt. Bidwell (Calif.)	c				
North Star (Calif.)	c				
Patton Meadows[e]	4/26	48	19.2	15.9	- -
Quartz Mountain	4/29	0	0.0	0.0	0.6[h]
Quartz Mountain (Ext.)	4/29	0	0.0	0.0	- -
Sherman Valley[e]	c				
Silver Creek	c				
State Line[e] (Calif.)	c				
Strawberry	4/30	8	3.2	0.0	1.4[h]
Summer Rim[e]	4/26	48	19.2	17.8	- -
Summer Rim Snow Pillow	c				
Sycan Flat[e]	c				
Willow Creek[e]	c				

BASIC DATA SUPPLEMENT 1

MAY 1, 1971

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches) Last Yr.	Water Content (inches) Ave.[i]
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	4/29	37	15.8	18.6	8.4[h]
Blue Mtn. Springs Pillow	4/29		6.6	- -	- -
Buck Pasture[e]	[c]				
Buckskin Lake[e]	[c]				
Call Meadows[e]	[c]				
Crow Camp[e] (DISCONTINUED)	[c]				
Delintment Lake	[c]				
Denio Creek[e]	[c]				
Disaster Peak (Nev.)	[c]				
Emigrant Butte	[c]				
Fish Creek	[c]				
Hart Mountain[e]	[c]				
Idlewild Camp	4/28	0	0.0	0.0	0.9[h]
Izee Summit	4/26	5	1.5	5.2	2.0[h]
Lake Creek R.S.	4/28	3	1.0	6.8	- -
Oregon Canyon[e]	[c]				
Rock Spring	4/28	0	0.0	0.2	0.2[m]
Silvies	[c]				
Snow Mountain	[c]				
Snow Mountain Pillow	[c]				
Starr Ridge	4/26	3	1.1	1.7	0.6[h]
Stinking Water	5/3	0	0.0	0.0	- -
Trout Creek[e]	[c]				
"V" Lake[e]	[c]				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches) Last Yr.	Water Content (inches) Ave.[i]

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953–67 adjusted average. (i) 1953–67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

MAY 1, 1971

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [i]
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	[c]		11.5[f]	- -
Big Bend (Nev.)	6700	48	16.7	4/30	16.7	16.7	16.5
Blue Mountain Spring	5900	42	16.9	4/29	12.9	12.3	13.2
Crane Prairie	5375	48	18.2	4/29	17.9	18.1	17.7
Folly Farm	4450	30	12.5	[c]			
Jack Creek, Lower (Nev.)	6800	48	8.6	4/30	7.5	8.1	8.4
Jordan Valley	4390	48	19.3	5/3	16.7	16.5	- -
Mud Flat (Ida.)	5500	48	12.8	[c]			
Rodeo Flat (Nev.)	6800	42	11.0	3/24	5.7[f]	11.0	- -
Taylor Canyon (Nev.)	6200	48	15.1	4/30	15.1	11.8	14.6
Triangle (Ida.)	5150	48	16.6	[c]			
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	4/29	16.6	16.0	14.6
Dooley Mountain	5430	36	9.2	4/26	7.2	7.0	6.8
Emigrant Springs	3925	48	22.3	4/28	22.1	21.2	20.9
Ladd Summit	3730	48	18.9	4/30	13.5	13.4	11.8
Moss Springs	5850	36	25.8	4/30	17.3	14.6	- -
Tollgate	5070	48	23.6	4/27	16.9	16.8	17.9
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/28	13.8	13.8	13.4
Emigrant Springs	3925	48	22.3	4/28	22.1	21.2	20.9
Tollgate	5070	48	23.6	4/27	16.9	16.8	17.9
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/28	13.8	13.8	13.4
Beech Creek	4800	48	21.3	4/27	18.2	16.7	16.3
Blue Mountain Spring	5900	42	16.9	4/29	12.9	12.3	13.2
Blue Mountain Summit	5100	36	16.8	4/29	16.6	16.0	14.6
Derr	5670	24	9.0	[c]			
Marks Creek	4540	36	14.1	4/29	13.9	13.2	13.1
Snow Mountain	6300	48	16.7	[c]			
Starr Ridge	5150	36	10.6	4/26	10.6	10.6	10.4
Williams Ranch	4500	42	17.9	4/26	17.7	16.4	16.8
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	[c]			
Marks Creek	4340	36	14.1	4/29	13.9	13.2	13.1
Snow Mountain	6300	48	16.7	[c]			
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS							
Cooper Spur	3490	72	26.4	4/30	14.4	14.3	- -
KLAMATH WATERSHEDS							
Bly Mountain	5090	42	14.0	4/29	12.8	12.3	12.3

BASIC DATA SUPPLEMENT 2

MAY 1, 1971

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average *i*
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	4/30	13.2	13.0	13.1
Quartz Mountain	5230	48	15.3	4/29	10.0	10.0	9.4
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	4/29	12.9	12.3	13.2
Fish Creek	7900	48	15.0	*c*			
Folly Farm	4450	30	12.5	*c*			
Silvies	6900	48	16.4	*c*			
Snow Mountain	6300	48	16.7	*c*			
Starr Ridge	5150	36	10.6	4/26	10.6	10.6	10.4
Willow-Bald	5000	24	6.6	4/27	6.6	6.0	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953–67 adjusted average. (i) 1953–67, 15 year average. (j) Telephonic report - data not confirmed (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 3

MAY 1, 1971

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precip-itation	Last Year	Average +
Arbuckle Mountain (Morrow County)	5400	3/29 to 4/30	2.47	3.55	- -
Camas Creek (Lake County)	5825	3/31 to 4/30	2.95	2.60	- -
County Line (Umatilla Co.-Starkey Hdqrs.)	4800	3/30 to 4/30	2.60	1.70	- -
Crane Prairie (Grant County)	5375	3/26 to 4/29	2.00	- -	- -
Eilertson Meadows (Baker County)	5400	3/25 to 4/27	2.00	- -	- -
Marks Creek (Crook-Wheeler Cos.)	4540	3/26 to 4/29	1.15	- -	- -
Quartz Mountain Summit (Lake County)	5530	4/1 to 4/29	3.18	1.28	- -
Strawberry (Lake County)	5760	3/31 to 4/30	2.65	1.40	- -
Taylor Butte (Klamath County)	5040	3/31 to 4/29	1.65	0.20	- -
Taylor Green (Union County)	5800	4/1 to 4/30	2.30	2.60	- -

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name	Sec	Twp	Rge	Elev
16G6	Antelope Ridge (Ida)	20	8S	1E	5900
16G9a	Battle Creek (Ida)	10	11S	1E	5700
15H1MA	Bear Creek (Nev)	31	46N	58E	7800
15H4MP	Big Bend (Nev)	30	45N	56E	6700
17G2m	Blue Mtn Pass	4	38S	42E	5290
17H2	Buckskin, Lower (Nev)	25	45N	39E	6700
17H1	Buckskin, Upper (Nev)	11	45N	39E	7200
16G10a	Bull Basin (Ida)	29	12S	5W	5600
16H6a	Columbia Basin (Nev)	31	44N	53E	6650
16H1	Disaster Peak (Nev)	8	47N	34E	6500
16H8a	Fawn Creek (Nev)	2	45N	52E	7000
18G2MPA	Fish Creek	4	33S	33E	7900
18G3m	Folly Farm Summit	8	30S	38E	4450
15H2	Fox Creek (Nev)	33	46N	58E	6800
15H7	Fry Canyon (Nev)	31	43N	54E	6700
15H5	Gold Creek (Nev)	31	45N	56E	6600
17H4	Granite Peak (Nev)	22	44N	39E	7800
16G5a	Hyde Pasture (Ida)	31	8S	2W	5800
16H1M	Jack Creek, Lower (Nev)	18	42N	53E	6800
16H2A	Jack Creek, Upper (Nev)	9	42N	53E	7250
16H4	Jack Peak (Nev)	28	42N	53E	8420
17G3m	Jordan Valley	2	30S	46E	4390
16H5	Laurel Draw (Nev)	20	45N	53E	6700
17G6a	Lookout Butte	2	40S	47E	5650
17G4a	Louse Canyon	27	40S	44E	6440
17H3	Martin Creek (Nev)	18	44N	40E	6700
15H20a	Merritt Mountain (Nev)	10	46N	54E	7000
16H3AP	Midas (Nev)	18	39N	46E	7200
16G7MP	Mud Flat (Ida)	34	9S	2W	5500
17G5a	Oregon Canyon	9	40S	40E	6950
17H6a	Quinn Ridge (Nev)	9	47N	41E	6300
16G11e	Red Canyon (Ida)	32	11S	4W	6500
15H6MP	Rodeo Flat (Nev)	36	43N	53E	6800
15H3A	76 Creek (Nev)	6	44N	58E	7100
16F3AP*	Silver City (Ida)	6	5S	3W	6400
18G1MPA	Silvies	35	32S	32½E	6900
16G1P	South Mountain No. 2 (Ida)	10	8S	5W	6340
15H19a	Stag Mountain (Nev)	32	41N	58E	7800
16F6a	Succor Creek (Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon (Nev)	35	39N	53E	6200
16H7e	Toe Jam (Nev)	29	40N	50E	7700
15H8	Tremewan Ranch (Nev)	9	39N	55E	5700
16G4MA	Triangle (Ida)	25	7S	3W	5150
18G5a	Trout Creek	10	41S	38E	7800
18G7a	"V" Lake	31	35½S	32½E	6600
16G12a	Vaught Ranch (Ida)	10	11S	1W	5950
16G13a	War Eagle (Ida)	20	5S	3W	7700

Malheur River

Number	Name	Sec	Twp	Rge	Elev
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18F6a	Buck Pasture	21	29S	35E	5700
18E21a	Bully Creek	10	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	10	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18F8a	Crow Camp	26	23S	34E	5500
18E20	Eldorado Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5120
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18E32p'	S. Fk. Willow Cr.	2	16S	37E	5500
18F4P	Stinking Water	33	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec	Twp	Rge	Elev
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1MP	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9P	Tipton	34	10S	35½E	5100

Powder River

Number	Name	Sec	Twp	Rge	Elev
18E1P	Anthony Lake	18	7S	37E	7125
18E5	Bourne	33	8S	37E	5800
17E1MP	Dooley Mountain	32	11S	40E	5430
18E3	Ellertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6A	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E30	Little Antone	1	7S	37E	5000
18E28	Power Plant	33	7S	38E	3990
17D7P	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec	Twp	Rge	Elev
17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1P	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14 & 15	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5150
18D8P	County Line	18	4S	34E	4800
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	28	2S	42E	7400
17D7P	Taylor Green	3	6S	42E	5740
18D3M	Tollgate	32	4N	38E	5070
17D16a	TV Ridge No. 2	12	2S	43E	7000

Imnaha River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
17D14a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18D4M	Emigrant Springs	29	1N	35E	3925
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
18D3M	Tollgate	32	4N	38E	5070
18D13	Walla Walla Diversion	22	6N	38E	2400

Walla Walla River

Number	Name	Sec	Twp	Rge	Elev
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3M	Tollgate	32	4N	38E	5070
18D17	Weston Mountain	25	4N	35E	2700

Willow Creek

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18E1P	Anthony Lake	18	7S	37E	7125

LEGEND

19D7	SNOW COURSE ONLY
19D2M	SNOW COURSE AND SOIL MOISTURE
19D2MA	SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
19D2A	SNOW COURSE AND AERIAL MARKER
19D2m	SOIL MOISTURE ONLY
19D2a	AERIAL MARKER ONLY
19D2P	SNOW COURSE AND PRECIPITATION GAGE
19D2p	PRECIPITATION GAGE ONLY
*	RADIO TELEMETRY

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
19E2M	Beech Creek Summit	32 & 33	11S	30E	4650
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
19E3MP	Derr	14	13S	23E	5670
18E27a	East Fork Canyon	15	15S	32E	5700
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6P	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7a	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18E9P	Tipton	34	10S	35½E	5100
18E25MP	Williams Ranch	20	15S	32E	4500

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21E11	Black Pine Spring	14	16S	9E	4600
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F11	Chemult	21	27S	8E	4760
21F20P	Deer Creek	25	20S	7E	4554
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	30	18S	11E	4400
21F6'	Irish-Taylor	25	20S	6E	5500
21F17	Howlch	29	25S	8E	4700
21F10	New Crescent Lake	11	24S	6E	4800
21E16	New Dutchman Flat #2	21	18S	9E	6400
21F3	Tangent	28	18S	10E	5400
21E15	Three Creeks Butte	27	16S	9E	5200
21E13	Three Creeks Meadows	34	16S	9E	5650
22F2P	Waldo Lake	15	21S	6E	5500
22F14*	Willamette Pass	33	24S	5½E	5800

Crooked River

Number	Name	Sec	Twp	Rge	Elev
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	23	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1M	Snow Mountain	1	19S	26E	6300
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4100
21D25M	Cooper Spur	6	2S	10E	3690
21D1	Greenpoint Reservoir	27	2N	9E	3200
21D20	Knebal Springs	11	1S	11E	3850
21D23	Parkdale	5	1S	10E	1770
21D8*	Phlox Point	7	3S	9E	5400
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3670
21D28	Switchback	28	1S	9E	3255
21D7P	Tilly Jane	15	2S	9E	6000
21D21	Ulrich Ranch Junction	28	1S	11E	3350
21D30	Umbrella Falls	3	3S	9E	5400
21D24	Upper Valley	20	1S	10E	2530

Mile Creeks - Mosier Creek

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3850
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Sandy River

Number	Name	Sec	Twp	Rge	Elev
21D8*	Phlox Point	[illegible]	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec	Twp	Rge	Elev
21D3	Clackamas Lake	35	[illegible]	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D14P'	Peavine Ridge	14 & 15	6S	7E	3500
21D8'	Phlox Point	7	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670

Santiam River

Number	Name	Sec	Twp	Rge	Elev
22E1	Detroit (City)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	28	11S	7E	2730
22E3	Mill City	29	9S	3E	828
21E5	Santiam Junction	14	13S	7E	3990
21E3	Whitewater Bridge	20	10S	7E	2175

McKenzie River

Number	Name	Sec	Twp	Rge	Elev
21E8	Dead Horse Grade	13	16S	7E	3800
22E4	Lost Creek Ranch	24	16S	6E	1950
21E7	McKenzie	35	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2800

Middle Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F3	Cascade Summit	7	23S	6E	4880
22F6	McCredie Springs	36	21S	4E	2120
22F8	Meridian Dam	13	19S	1W	750
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F2P	Waldo Lake	15	21S	6E	5500
22F14'	Willamette Pass	33	24S	5½E	5000

Coast Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R. S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

Number	Name	Sec	Twp	Rge	Elev
23E1	Mary's Peak	21	12S	7W	3620

Luckiamute River

Number	Name	Sec	Twp	Rge	Elev
23E2	Laurel Mountain	6	8S	7W	3000
23E3	Valsetz Summit	3	[illegible]	7W	2250

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec	Twp	Rge	Elev
23G4P	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21P	Big Red Mountain	31	40S	1W	6250
22G13P	Billie Creek Divide	30	36S	5E	5300
22G34	Calihan	16	40S	1E	6500
22G27	Deadwood Junction	6	38S	4E	4600
22F19	Diamond-Crater Summit	34	28S	6E	5800
22G14P	Fish Lake	3	37S	4E	4865
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	38S	3E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G22	Little Red Mountain	25	40S	2W	6500
22G31	Mt. Ashland Switchback	15	40S	1E	6400
23G14	Mule Creek	8	32S	9W	3600
23G15	Page Mountain	5	41S	7W	4045
22G15	Park Headquarters	8	31S	6E	6550
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	30	36S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G32	Ski Bowl Road	22	40S	1E	6000
22G9	South Fork Canal	12	37S	3E	3500
22G1	Whaleback	4	31S	2E	5025

Umpqua River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F18P	Diamond Lake	29	27S	6E	5315
23G8	King Mountain No. 1	5	33S	4W	3500
23G9	King Mountain No. 2	4	33S	4W	4000
23G10	King Mountain No. 3	33	32S	4W	3648
23G11	King Mountain No. 4	33	32S	4W	3049
23G12	King Mountain No. 5	29 & 28	32S	4W	2380
23G13	King Mountain No. 6	20	32S	4W	1820
22F16	North Umpqua	19	27S	6E	4200
22F23	Red Butte No. 1	36	27S	1W	3500
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	4500
22F26	Red Butte No. 4	30	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	[illegible]
22G1	Whaleback	4	31S	2E	5025

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name	Sec	Twp	Rge	Elev
22G6	Annie Spring	19	31S	6E	6018
22G13P	Billie Creek Divide	30	36S	5E	5300
21G5M	Bly Mountain	15 & 22	37S	11E	5090
21F11	Chemult	21	27S	8E	4760
22G24*	Cold Springs Camp	12	35S	5E	6100
20G12a	Crazyman Flat	9	34S	19E	6100
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit	34	28S	6E	5800
21F15	Diamond Lake Jct. (97)	1	28S	7E	4600
21G6a	Dry Hollow	1	40S	14E	4900
20G14n	Finley Corrals	11	36S	14E	6000
22G12	Fourmile Lake	9	36S	5E	6000
21G4P	Gerber	12	39S	13E	4850
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G15	Lake of the Woods	11	37S	5E	4960
22G5	Park Headquarters	8	31S	6E	6550
22G25	Pelican Guard Station	9	36S	6E	4150
20G6MP	Quartz Mountain	2	38S	16E	5520
22G11	Seven Lakes No. 2	26	33S	5E	6100
22G33	Seven Mile	20	33S	6E	5725
20H1n	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760
20G2AP	Summer Rim	22	33S	16E	7200
21G2	Sun Mountain	22	37S	7½E	5350
20G13n	Sycan Flat	25	31S	14E	5300
21G3P	Taylor Butte	21	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec	Twp	Rge	Elev
1	Bently (PP&L)	22	38S	12E	4300
10	Bly 101 Ranch (PP&L)	22	35S	14E	4800
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
8	Harriman Lodge (PP&L)	3	36S	6E	4200
6	Kirk (PP&L)	1	33S	7E	4535

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name	Sec	Twp	Rge	Elev
20G15n	Bear Flat Meadow	27	39S	19E	6900
20G8MP	Camas Creek	5	39S	21E	5720
20G11A	Cox Flat	16	37S	18E	5750
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
20H3a	Dismal Swamp (Cal)	31	48N	22E	7200
20G17a	Patton Meadow	28	38S	18E	6800
20G6MP	Quartz Mountain	2	38S	16E	5520
20H1n	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760
20G10n	Willow Creek	13	41S	21E	6020

Abert Lake

Number	Name	Sec	Twp	Rge	Elev
20G15n	Bear Flat Meadow	27	38S	19E	6400
20G16np	Calvin Creek	12	36S	21E	6550
20G11A	Cox Flat	16	37S	18E	5750
20G14n	Finley Corrals	11	36S	14E	6000
20G4	Hill Creek	1	34S	17E	6200
20G6MP	Quartz Mountain	2	38S	16E	5520
20G10a	Sherman Valley	15	37S	21E	6600

Summer Lake

Number	Name	Sec	Twp	Rge	Elev
20G2AP	Summer Rim	22	33S	16E	7200

Silver Lake

Number	Name	Sec	Twp	Rge	Elev
21F12P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5300

Warner Lake

Number	Name	Sec	Twp	Rge	Elev
20G8MP	Camas Creek	5	39S	21E	5720
20H3a	Dismal Swamp (Cal)	31	48N	22E	7200
19G1n	Hart Mountain	1	36S	25E	6380
20G10n	Sherman Valley	15	37S	21E	6600
20G10n	Willow Creek	13	41S	21E	6020

Guano Lake

Number	Name	Sec	Twp	Rge	Elev
19H1	Bald Mountain (Nev)	17	45N	21E	6720
19G1n	Hart Mountain	1	36S	25E	6350
19H4n	Little Bally Mt. (Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

Number	Name	Sec	Twp	Rge	Elev
18F9a	Fall Mountain	29	20S	33E	5340
19F2	Delintment Lake	28	19S	26E	5000
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19E9P	Izee Summit	28	16S	29E	5293
18F1	[illegible] Spring	29	18S	32E	5100
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18F4P	Stinking Water	33	21S	34E	4800
19F4a	Willow-Bald	19	22S	29E	5000

Donner Und Blitzen River

Number	Name	Sec	Twp	Rge	Elev
18F6a	Buck Pasture	21	29S	35E	5700
18G2MPA	Fish Creek	4	33S	32½E	7900
19G1n	Hart Mountain	1	36S	25E	6350
18G1MPA	Silvies	35	32S	32½E	6900
18G7a	"V" Lake	31	35½S	32½E	6600

Trout and Whitehorse Creeks

Number	Name	Sec	Twp	Rge	Elev
18H6a	Denio Creek	14	41S	34E	6000
18H1	Disaster Peak (Nev)	8	47N	34E	6500
17G5a	Oregon Canyon	9	40S	40E	6950
18G5a	Trout Creek	10	41S	38E	7800

Harney Lake

Number	Name	Sec	Twp	Rge	Elev
18F8a	Buckskin Lake	25	29S	30E	5200

Map and Index to OREGON SNOW COURSES

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- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
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  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - Weather Bureau
- Department of the Interior
  - Bonneville Power Administration
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